

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/705,298	SILVER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	DANIEL G. MARIAM	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTO-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS**. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to a telephone interview dated September 26, 2005.
2.  The allowed claim(s) is/are 122-152 (will be renumbered as 1-31).
3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some\*
  - c)  None
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

- 1.  Notice of References Cited (PTO-892)
- 2.  Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3.  Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 11/10/2003
- 4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
- 5.  Notice of Informal Patent Application (PTO-152)
- 6.  Interview Summary (PTO-413),  
Paper No./Mail Date 9/26/2005
- 7.  Examiner's Amendment/Comment
- 8.  Examiner's Statement of Reasons for Allowance
- 9.  Other \_\_\_\_\_

  
**DANIEL MIRIAM**  
**PRIMARY EXAMINER**

## **EXAMINER'S AMENDMENT AND REASONS FOR ALLOWANCE**

### **Examiner's Amendment**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Russel Weinzimmer (Reg. No. 36,717) on September 26, 2005.

The application has been amended as follows:

Amend the amended specification (dated November 11, 2003) as follows:

In page 2 of the specification, under the heading "Cross Reference to Related Applications", replace the first paragraph with the following paragraph:

This is a continuation of U.S. Patent Application Serial Number 09/746,147 filed 12/22/2000 which is now U.S. Patent Number 6,658,145 issued on December 2, 2003, which is a continuation of U.S. Patent Application Serial Number 09/001,869, filed 12/31/1997 (now abandoned), which is a continuation-in-part to U.S. Patent Application Serial Number 08/979,588, filed 11/26/1997 (now abandoned).

Amend the claims as follows:

Cancel the originally filed claim 121. Please note, while applicants have canceled claims 1-120 of the originally filed claims by the amendment (See page 3 of the preliminary amendment filed November 11, 2003), and have submitted newly added claims 121-151 (See pages 3-7 of the preliminary amendment), the originally filed claims in fact contain claims 1-121.

Renumber the newly added claims **121-151** as **122-152**.

amend the **newly renumbered claims 142, 143, 146, and 147-149** as follows:

Amend the newly renumbered claim 142 as follows:

At line 5, delete the limitation “adapted” and replace it with “configured” --

At line 9, delete the limitation “adapted” and replace it with “configured” --

At line 13, delete the limitation “adapted” and replace it with “configured” --

At line 16, delete the limitation “adapted” and replace it with “configured” --

At line 19, delete the limitation “adapted” and replace it with “configured” --

At line 24, delete the limitation “adapted” and replace it with “configured” --

At line 27, delete the limitation “adapted” and replace it with “configured” --

At line 31, delete the limitation “adapted” and replace it with “configured” --

At line 35, delete the limitation “adapted” and replace it with “configured” --

Amend the newly renumbered claim 143 as follows:

At line 3, delete the limitation “adapted” and replace it with “configured” --

Amend the newly renumbered claim 146 as follows:

At line 5, delete the limitation “adapted” and replace it with “configured” --

At line 8, delete the limitation “adapted” and replace it with “configured” --

At line 13, delete the limitation “adapted” and replace it with “configured” --

At line 16, delete the limitation “adapted” and replace it with “configured” --

Amend the newly renumbered claim 147 as follows:

At line 3, delete the limitation “adapted” and replace it with “configured” --

Amend the newly renumbered claim 148 as follows:

At line 3, delete the limitation “adapted” and replace it with “configured” --

Amend the newly renumbered claim 149 as follows:

At line 3, delete the limitation “adapted” and replace it with “configured” --

### **Reasons for Allowance**

2. Newly renumbered claims 122-152 are allowed. The claims will be renumbered as 1-31.

The following is an examiner’s statement of reasons for allowance: the instant invention discloses interpolating a vector-valued function relating a plurality of at least two-dimensional positions to a plurality of respective displacement vectors. Upon acquisition of an array of grid elements, each having a coordinate region, containing a displacement vector magnitude and displacement vector, the instant invention provides a real-valued input position vector having real valued coordinates, the coordinates falling within the region of a grid element, and then uses a unit vector in the displacement vector direction to provide an interpolated displacement vector magnitude. Thereafter, the instant invention combines the interpolated displacement vector magnitude, the unit vector in the displacement direction, and the displacement vector direction so as to provide an interpolated displacement vector corresponding to the real-valued input position vector. These features and in combination with all of the other elements of the claims are not disclosed or fairly suggested by any of the prior art of records.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

### Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL G. MARIAM whose telephone number is 571-272-7394. The examiner can normally be reached on M-F (7:00-4:30) FIRST FRIDAY OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BHAVESH M. MEHTA can be reached on 571-272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
DANIEL G MARIAM  
Primary Examiner  
Art Unit 2625

September 26, 2005